Dear Authors,

Thank you for the revised version of your manuscript which takes into account all previously raised questions. Please note that there are still three minor or very minor issues:

Dear Editor,

We deeply thank you for your careful reading

1. Figure 2.

The y-axis label should read "Absorption (10^-10 cm^-1) - 3416" to be dimensionally consistent.

Done

2. Allan Variance

L171 "At a delay of two days, we observe an AD for δ 18O of 1 ‰ at 100 ppm and 0.09 ‰ at 500 ppm (2.5 ‰ and 0.7 ‰

for δD at 100 ppm, and 500 ppm, respectively). For comparison, the maximum values of AD for $\delta 180$ between 104 and 105 s

are 1 ‰ (100 ppm) and 0.23 ‰ (500 ppm); for δD , 3.9 ‰ (100 ppm) and 1.3 ‰ (500 ppm). "

Since there are no data points at 48 h, nothing can be observed at a delay of two days. The text must be adapted accordingly (I 171, eventually also the text in the abstract). Moreover, the last few points at the end of an Allan Variance analysis are usually not very reliable and the observed levelling-off of the red AD curves might not be valid. If required, a safer way to extrapolate to 2 days would be to assume a linear drift of the instrument (slope = $\pm 1/2$).

Finally, please show all data in Fig. 4 with error bars (or none). It is mostly the long tau-values that are interesting.

In fact, we had in mind this 48 h "reference" because of the calibration scheme used so far, but with the new improvements to reduce the time between two calibrations, the values at 24 hours are indeed more relevant for the paper and future work.

—> we refer now to the AD values at one day in the text (line 173) and indicate the one-day and two-day dotted lines in the Figure but without giving speculative extrapolated AD values.

We acknowledge the envelopes in Figure 4 were misleading since they were related to the dispersion of the different AD analyses performed only for short time scales. For the homogeneity of the figure, we have removed them.

3. Reference Time

In the abstract, the discussion of the Allan deviation and the discussion of the instrument use in the AWACA project, different reference times are used. While it is 48 h for the former, section 3.1 (and Fig. 8) refers to 24 h. This is confusing. The presentation should either be homogenized or the choice of different reference periods explained better.

It has been homogenized to refer to 24 h as explained above (lines 19; 173 and following)